

Application No. 10/686,154
Response to Office Action dated December 16, 2009
Reply to Office action dated October 29, 2009

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. (currently amended) A system enabling minimally invasive procedures at a surgical location at or near the spine of a patient, said system comprising:
an elongate body having an inner surface defining a passage extending through the elongate body and through which surgical instruments can be inserted to the surgical location, said elongate body capable of having a configuration when inserted within the patient wherein the cross-sectional area of said passage at a first location is greater than the cross-sectional area of said passage at a second location, wherein the first location is distal to the second location, said elongate body having a proximal portion and a distal portion, wherein the proximal portion is independently pivotable relative to the distal portion; and
a support arm configured to support the proximal portion of the elongate body hands-free outside the patient when the distal portion is inserted at the surgical location, the support arm configured to pivot the proximal portion relative to the distal portion, and to support and maintain the proximal portion in the pivoted position.
2. (previously presented) The system of Claim 1, wherein the support arm is operably connected to the proximal portion of the elongate body.
3. (original) The system of Claim 2, wherein the elongate body is arranged along an axis and the support arm is configured to substantially surround the axis when the elongate body is received by the support arm.
4. (original) The system of Claim 1, wherein the support arm comprises an arcuate portion at least partially surrounding a proximal portion of the elongate body.

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5. (original) The system of Claim 4, wherein the arcuate portion extends more than 180 degrees around the proximal portion of the elongate body.

6. (original) The system of Claim 1, further comprising a viewing device support.

7. (original) The system of Claim 6, wherein the viewing device support is coupled with the support arm.

8. (original) The system of Claim 6, further comprising a viewing device.

9. (previously presented) The system of Claim 8, wherein the viewing device is selected from the group consisting of a camera, an endoscope, a microscope, and magnifying glasses.

10-12. (canceled)

13. (previously presented) The system of claim 4, wherein the support arm has at least one adjustment mechanism configured to move the elongate body relative to the support arm.

14. (previously presented) The system of Claim 1, wherein the support arm is configured to removably receive the proximal end of the elongate body.

15. (previously presented) The system of Claim 4, wherein the elongate body is arranged along an axis and the arcuate portion of the support arm is substantially centered on the axis when the elongate body is received by the support arm

16-22. (canceled)

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23. (previously presented) A device for providing access to a first location adjacent the spine of a patient, comprising:

an elongate body having a proximal end and a distal end and a passage extending through the elongate body through which surgical instruments can be delivered, said elongate body being enlargeable such that the passage at a distal location is larger than the passage at a proximal location; and

a support arm operably connected to the proximal end of the elongate body, the support arm extending generally transverse to an axis defined along the passage of the elongate body between the proximal and distal ends, the support arm configured to support and position the elongate body outside of the patient when the device is applied to the patient, the support arm configured such that a user may place the elongate body in a desired position relative to the patient, and the support arm maintains the elongate body in the desired position without being held by a user.

24. (previously presented) The device of Claim 23, wherein the elongate body is configured with an amount of overlap, the amount of overlap being reduced when the elongate body is enlarged.

25. (original) The device of Claim 23, wherein the elongate body has a length extending between the first location and the skin of the patient when the device is applied to the patient.

26. (previously presented) A system enabling minimally invasive procedures at a surgical location at or near the spine of a patient, said system comprising:

an elongate body having an inner surface defining a passage extending through the elongate body and through which surgical instruments can be inserted to the surgical location, said elongate body being expandable from a first configuration for insertion into a patient to a second configuration when inserted within the patient wherein the cross-sectional area of said passage at a first location is greater than the cross-sectional area of said passage at a second location, wherein the first location is distal to the second location; and

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a first support arm configured to support the elongate body outside the patient when the system is applied to the patient the support arm configured to move the elongate body and to maintain the elongate body in a desired position relative to the patient without being held by a user; and

a second support arm configured to support a viewing device without being held by a user, the second support arm coupled to the first support arm.

27. (previously presented) The system of Claim 26, wherein the elongate body extends along an axis and the first support arm is configured to substantially surround the axis when the elongate body is received by the first support arm.

28. (previously presented) The system of Claim 26, wherein the first support arm comprises an arcuate portion at least partially surrounding a proximal portion of the elongate body.

29. (original) The system of Claim 28, wherein the arcuate portion extends more than 180 degrees around the proximal portion of the elongate body.

30. (previously presented) The system of Claim 27, further comprising an adjustment mechanism configured to provide axial adjustment of the first and second support arms relative to each other along the axis.

31. (previously presented) The system of Claim 30, wherein the second support arm is configured to position the viewing device in the passage.

32. (previously presented) The system of Claim 30, further comprising a viewing device selected from the group consisting of a camera, an endoscope, a microscope, and magnifying glasses.

33-36. (canceled)

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37. (previously presented) The system of claim 1, wherein the support arm is configured to support the elongate body and to support an additional device relative to the passage of the elongate body, wherein the support arm extends generally perpendicular to a longitudinal axis of the elongate body when the support arm engages the elongate body.

38. (canceled)

39. (previously presented) The system of Claim 37, wherein the support arm is configured to support the elongate body proximal of the first location.

40. (previously presented) The system of Claim 37, wherein said additional device is a viewing device, the system further including the viewing device coupled to the support arm.

41. (previously presented) The system of Claim 40, further including an adjustment mechanism configured to move the viewing device relative to the elongate body.

42. (previously presented) The system of Claim 41, wherein the support arm is configured to indirectly support the viewing device.

43. (previously presented) The system of Claim 41, wherein the adjustment mechanism adjustably moves the viewing device along an axis that is generally parallel to a longitudinal axis of the elongate body.

44. (previously presented) The system of Claim 40, wherein the viewing device comprises a viewing element, wherein the viewing element includes one or more of a camera, an endoscope, a microscope, and magnifying glasses.

45-49. (canceled)

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50. (previously presented) The system of Claim 44, wherein the viewing element is configured to be extended through the passage toward the surgical location at or near the spine.

51. (previously presented) The system of Claim 40, wherein the viewing device is configured to be extended through the passage toward the surgical location at or near the spine.

52. (previously presented) The system of Claim 37, further comprising a viewing device operably coupled with the elongate body.

53. (previously presented) The system of Claim 52, wherein the viewing device is adjustable along an axis that is generally parallel to a longitudinal axis of the elongate body.

54. (previously presented) The system of Claim 52, wherein the viewing device comprises a viewing element, wherein the viewing element includes one or more of a camera, an endoscope, a microscope, and magnifying glasses.

55-59. (canceled)

60. (previously presented) The system of Claim 54, wherein the viewing element is configured to be extended through the passage toward the surgical location at or near the spine.

61-106. (canceled)